



# Artificial Hype

**GE HEALTHCARE**  
SPECIAL SUPPLEMENT

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# Will AI lead to job cuts or will the tech improve working lives?

Can Artificial Intelligence (AI) be trusted to better working conditions and create more jobs or, as the technology becomes more widespread in healthcare, will it be a threat to employment in the sector? HealthManagement.org spoke to four Artificial Intelligence (AI) experts for their views.



We are certainly witnessing a huge reshaping of the healthcare profession and our expectations about it. I suspect many jobs will become digitally-intense, in terms of interaction with and supervision of technological solutions. New jobs will be made possible by the lowering of the bar of the economically viable (think of the budget airlines equivalent). I also suspect there may be a growth in health management and prevention jobs. The whole industry of personalised medicine will create investments and create jobs.

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AI is changing the world. Now, machines can recognise images, they can tell a story about a picture such as ‘this image represents a blue train in the desert.’ Machines can compose music, paint and mimic human speech in real-time. However, machines haven’t yet won our trust. Few would trust flying in a plane without a pilot, even though planes can fly without human intervention. Likewise, who would let a computer do a diagnosis or a therapy, without any human supervision? So building trust in machines requires taking a giant step forward. It is not about understanding how it works, it is not about opening the black-box of machine learning. It is about reliability and reproducibility, with, well, something very human called trust. Trust takes time to build and takes no time to lose.



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In the initial phase I would not be worried about healthcare job cuts. AI implementation will constitute a great opportunity for healthcare specialists to improve the way we perform our duties and collaborate in the development of a new technology. As a cardiac imaging specialist, one of the great advances could be the automatization of routine and time-consuming tasks that, with the help of AI, could become more efficient and consistently accurate. At the end of the day, this will save a lot of time that could be used on other activities by the healthcare workers. In the first phase, the healthcare worker will confirm the work of the machine, but from my point of view, probably, in a second phase, the results will be accepted without human intervention. Therefore, this second period will be a time when healthcare specialists will need to reinvent their function to maintain their jobs or transform the way we treat patients as an interface between patients and machines guided by AI.

There are no worries about artificial intelligence implementation eliminating radiologists' jobs. But it is interesting to imagine how our work could change. There is a special interest in the AI automation of interpretation of medical imaging, since radiologists' costs is one of the biggest expenses in radiology. But AI implementation in radiology faces many challenges, the standardisation of AI algorithms being the main one. It is envisioned that radiologists, working as data scientists, could play a central role in so-called precision medicine with a kind of "precision radiology" to which radiomics could add important information. But there is a lot of work to be done, especially in demonstrating that the implementation of AI and Big Data in Radiology is capable of improving the outcome for our patients and the efficiency of healthcare systems. Technical advances in imaging acquisition and big data envision a bright future for diagnostic imaging, which should continue to be led by the AI-powered radiologist.



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